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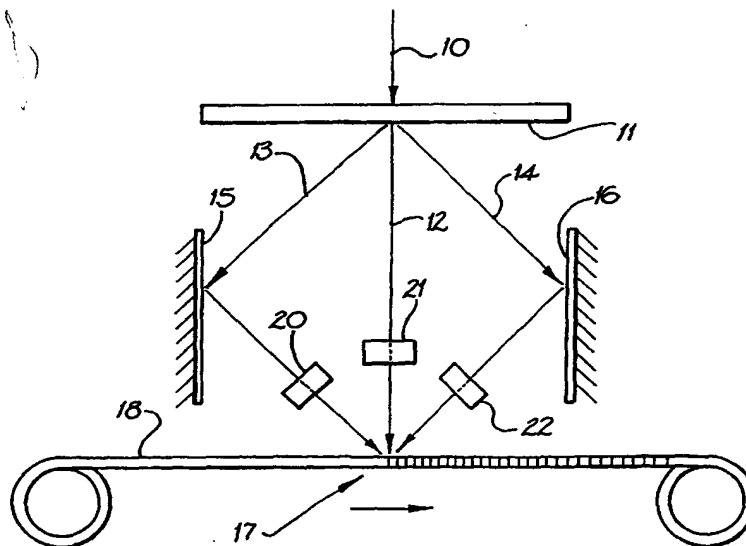
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- (72) Inventor; and  
(75) Inventor/Applicant (for US only): **CANNING, John** [AU/AU]; 10 Francis Street, Carlton, NSW 2218 (AU).
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- (74) Agent: **GRIFFITH HACK**; G.P.O. Box 4164, Sydney, NSW 2001 (AU).
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- (71) Applicant (for all designated States except US): **THE UNIVERSITY OF SYDNEY** [AU/AU]; Parramatta Road, Sydney, NSW 2006 (AU).
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(54) Title: **METHOD OF WRITING GRATING STRUCTURES**



(57) Abstract: A grating structure is written in a photosensitive waveguide (17) by dividing a coherent beam (10) into at least three beams (12, 13, 14), and interfering them at the waveguide (17). The beams may comprise a zero order beam (12) and two first order beams (13, 14) diffracted by a phase mask (11), and their relative phases and amplitudes may be modulated to control and/or tune the grating period and shape. The method allows grating structures to be written in which a first order grating and a second order grating are superimposed.

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